

REMARKS

This Supplemental Amendment is further to the Amendment dated July 12, 2010. Claims 1 to 3, 5 to 12, 32, and 33 are in the application, with Claim 1 being independent. Reconsideration and further examination are respectfully requested.

Applicants wish to thank the Examiner for the courtesies extended to Applicants' undersigned representative during the telephonic interview conducted on September 2, 2010. During the interview, the arguments and amendments presented in the July 12, 2010 Amendment were discussed.

The specification was objected to for an alleged informality, which has been attended to by the amendments made in the July 12, 2010 Amendment.

Claims 1 to 3, 5, 7 to 10, 12, 32, and 33 were rejected under 35 U.S.C. § 102(b) over U.S. Publication No. 2002/0191884 (Letant). Claims 11 and 33 were rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. § 103(a) over Letant. Claim 6 was rejected under 35 U.S.C. § 103(a) over Letant in view of U.S. Patent No. 3,973,118 (LaMontagne). Claim 32 was rejected under 35 U.S.C. § 103(a) over Letant in view of U.S. Patent No. 5,712,840 (Matsumura). These rejections are respectfully traversed.

Claim 1 recites, *inter alia*, (i) a two-division detector for detecting a change in position of an optical path of the light emitted from the periodic structure, and (ii) a calculation means for calculating the quantity of the target substance based on the change in position.

None of Letant, LaMontagne, and Matsumura, even in the proposed combinations, assuming, *arguendo*, that such could be combined, is seen to disclose or

suggest at least the foregoing features.

Letant describes that light from a light source 30 is transmitted through a photonic waveguiding silicon filter, detected by a microscope objective 34, and focused on a detector 36. Then, a computer 38 converts the data to produce a graph 40 of the transmission curve, i.e., the intensity of the light versus the wavelength. The computer 38 detects the presence of a target 23 and calculates its concentration. See para. [0049] and Figure 6 of Letant.

However, nowhere is Letant seen to disclose that the detector 36 is a two-division detector for detecting a change in position of an optical path of the light emitted from the filter, or that the computer 38 calculates the quantity of the target 23 based on the change in position.

LaMontagne and Matsumura have been reviewed, and are not seen to remedy the foregoing deficiencies of Letant.

The dependent claims are also submitted to be patentable because they set forth additional aspects of the claims and are dependent from the independent claim discussed above. Therefore, separate and individual consideration of each dependent claim is respectfully requested.

The application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

No fees are believed due; however, should it be determined that additional fees are required, the Director is hereby authorized to charge such fees to Deposit Account 06-1205.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,

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